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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,107	07/31/2003	Michael John Hodgson	CA1169	7745
23493	7590	06/05/2008	EXAMINER	
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2100 Pennsylvania Avenue, N.W.				
Washington, DC 20037				
			ART UNIT	PAPER NUMBER
			3696	
			NOTIFICATION DATE	DELIVERY MODE
			06/05/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/631,107	<b>Applicant(s)</b> HODGSON, MICHAEL JOHN	
	<b>Examiner</b> Samica L. Norman	<b>Art Unit</b> 3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

The Specification Objection, 35 U.S.C. 112, second paragraph and 35 U.S.C. 101 Rejections from the previous Office Action are withdrawn due to applicant's current amendment. The following are new grounds of Rejections.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 and 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Regarding claim 1.

- Claim 1 recites the term “an underlying.” It is unclear if the underlying is a stock or commodity, etc. Furthermore, claim language cannot be used in parenthesis.
- Claim 1 recites the phrase “at or around.” “At or around” is a relative term in which the metes and bounds cannot be determined.
- Claim 1 recites the term “and/or.” Back slashes should not be used in the claims.

4. Regarding claim 10. Claim 10 recites the limitation “wherein said further contracts have terms as defined in claim 1.” It is unclear whether the contract must include at least one term from claim 1 or whether the contract may include zero terms from claim 1.

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5. Regarding claims 12-14 and 16. It is unclear if a system or method is being claimed.
- Claims 12-14 are directed to a computer system. However, these claims refer to claims 1, 9 and 10 that are method claims.
  - Claim 16 is directed to a computer readable medium. However, these claims refer to claims 1, 9 and 10 that are method claims.
  - Claims 12-14 and 16 are single means claims, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. See MPEP 2164.08(a). What is included in the system claims lacks structure.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-7 and 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

8. Regarding claim 1. In many instances it is clear within which of the enumerated categories a claimed invention falls. The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter -- but rather on the essential characteristics of the subject matter, in particular, its practical utility. In the instant invention, the claimed subject matter does not cover either a 101 judicial exception or a practical application of a 101 judicial exception. The instant application is directed to abstract ideas. The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena. While this is easily stated, determining whether an applicant is seeking to patent an abstract idea, a law of nature or a natural phenomenon has proven to be challenging. These three exclusions recognize that subject matter that is not a practical application or use of an idea, a law of nature or a natural phenomenon is not patentable. See, e.g., *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874) (“idea of itself is not patentable, but a new device by which it may be made practically useful is”); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94, 40 USPQ 199, 202 (1939) (“While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.”); *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 (“steps of

‘locating’ a medial axis, and ‘creating’ a bubble hierarchy . . . describe nothing more than the manipulation of basic mathematical constructs, the paradigmatic ‘abstract idea’’).

9. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to nonstatutory subject matter. *Diamondv. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). In the instant application the process is not tied to another statutory class.

10. An example of a method claim that would qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

11. Regarding claims 12-14 and 16. The claims embrace or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. Id. at 1551

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Mosler et al., U.S. Patent No. 6,304,858 (reference A on the attached PTO-892).

14. As per claim 1, Mosler et al. teaches a method for facilitating trading, comprising the steps of: a. establishing a standardized form of contract for trading at a price on which a buyer and a seller agree, and having terms requiring the buyer and seller to settle based on a final settlement price (see column 4, lines 27-29); and; b. at least prior to a first reference time, facilitating trading of contracts based on said standardized form of contract through an exchange, a futures exchange, an options exchange, or a futures and options exchange (see column 4, lines 29-36); wherein said final settlement price is determined as follows: i. determining a first level of a specified observable quantity (an "underlying"), at or around said first reference time; ii. determining a second level of said underlying at or around a second reference time, determined in accordance with the contract terms, that is later than said first reference time; and iii. determining, in accordance with contract terms, the final settlement price by reference to both said first level and said second level, said final settlement price determined as something other than a simple average of the two levels (see column 7, lines 44-51).

15. As per claim 10, Mosler et al. teaches a method for facilitating trading, comprising: a. establishing a standardized form of contract for trading, having terms which provide that a buyer and a seller enter into a specified number of further contracts, for trading at an overall price agreed by the buyer and the seller; and b. at least prior to a first reference time, facilitating trading of contracts based on said standardized form of contract through an exchange, a futures exchange, an options exchange, or a futures and options exchange; c. facilitating the settlement into said further contracts; wherein said further contracts have at least one term as defined in claim 1 (see column 9, lines 62-65).

16. As per claim 11, Mosler et al. teaches a method of trading, comprising: trading a contract based on standardized form of contract through an exchange, a futures exchange, an options exchange, or a futures and options exchange, by telephone, internet, a wide area network or otherwise; wherein said standardized contract has at least one term as defined in any of claims 1, 9 or 10 (see column 5, lines 50-56, column 7, lines 63-67 and column 8, lines 1-21).

17. As per claim 12, Mosler et al. teaches a computer system for submitting trade order information relating to a standardized contract, said trade order information being entered by a trader, to an exchange, wherein said standardized contract has at least one term as defined in any of claims 1, 9 or 10 (see column 8, lines 48-55).

18. As per claim 13, Mosler et al. teaches a computer system for transmitting trade order information reflecting the prevailing buying and selling interest of a standardized contract on an exchange, a futures exchange, an options exchange, or a futures and options exchange; wherein said standardized contract has at least one term as defined in any of claims 1, 9 or 10 (see column 8, lines 48-55).



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19. As per claim 14, Mosler et al. teaches a computer system for displaying trade order information reflecting the prevailing buying and selling interest of a standardized contract on an exchange, a futures exchange, an options exchange, or a futures and options exchange; wherein said standardized contract has at least one term as defined in any of claims 1, 9 or 10 (see column 16, lines 19-25).

20. As per claim 15, Mosler et al. teaches a method for settling trades by clearing, through a clearinghouse, standardized contracts; wherein said standardized contracts have at least one term as defined in any of claims 1, 9 or 10 (see column 4, lines 29-36).

21. As per claim 16, Mosler et al. teaches a computer readable medium embodying a set of computer executable instructions, which, when executed by one or more processors cause the one more processors to perform a method for submitting trade order information relating to a standardized contract, said trade order information being entered by a trader, to an exchange, a futures exchange, an options exchange, or a futures and options exchange; wherein said standardized contract has at least one term as defined in any of claims 1, 9 or 10 (see column 15, lines 35-52).

### ***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 2-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosler et al., U.S. Patent No. 6,304,858 (reference A on the attached PTO-892) in view of Lara, U.S. PG-Pub No. 2004/0019555 (reference B on the attached PTO-892).

24. As per claim 2, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportionally to the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportionally to the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any (see paragraph 0026, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

25. As per claim 3, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportional to the excess of said strike level over said second level, if said second level is greater than said strike

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level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportional to the excess of said strike level over said second level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if (see paragraph 0026, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

26. As per claim 4, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. proportional to the excess of said second level over a call strike level, if said second level is greater than said call strike level; ii. proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or iii. zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative and/or additive adjustment, if any, and said put strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. proportional to the excess of said second level over a call strike level, if said second level is greater than said call strike level; ii. proportional to the excess of a put strike level over

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said second level, if said second level is less than said put strike level; or iii. zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative and/or additive adjustment, if any, and said put strike level is said first level subject to a multiplicative and/or additive adjustment, if any (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

27. As per claim 5, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is less than or equal to a strike level; or ii. proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any (see paragraph 0026, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same

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function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

28. As per claim 6, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is greater than or equal to a strike level; or ii. proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. zero, if said second level is greater than or equal to a strike level; or ii. proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative and/or additive adjustment, if any (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

29. As per claim 7, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: i. proportional to the square of the excess of said second level over a call strike level, if said second level is greater than said call strike level; ii. proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or iii. zero, if

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said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative and/or additive adjustment, if any and said put strike level is said first level subject to a multiplicative and/or additive adjustment, if any. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: i. proportional to the square of the excess of said second level over a call strike level, if said second level is greater than said call strike level; ii. proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or iii. zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative and/or additive adjustment, if any and said put strike level is said first level subject to a multiplicative and/or additive adjustment, if any (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

30. As per claim 9, Mosler et al. teaches a method for facilitating trading, comprising: a. establishing a standardized form of contract for trading at a price on which a buyer and a seller agree, and having terms which provide that the buyer is granted an option and the seller grants an option (see column 4, lines 27-29); and b. at least prior to a first reference time, facilitating trading of contracts based on said standardized form of contract through an exchange, a futures exchange, an options exchange, or a futures and options exchange (see column 4, lines 29-36); c.

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upon each valid exercise of said option by a buyer, facilitating the settlement associated with such exercise; wherein said further contracts have terms as defined in claim 1 (see column 9, lines 35-38 and 47-51) . Mosler et al. fails to teach wherein said option is either a call option or a put option over a specified quantity of further contracts, which the buyer may exercise during some specific time period(s), and with a specified strike price. Lara teaches wherein said option is either a call option or a put option over a specified quantity of further contracts, which the buyer may exercise during some specific time period(s), and with a specified strike price (see paragraph 0025, lines 1-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

### ***Conclusion***

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samica L. Norman whose telephone number is (571)270-1371. The examiner can normally be reached on Mon-Thur 6:30a-4p, w/ 1st Fri off & 2nd 6:30a-3p.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dixon can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ella Colbert/  
Primary Examiner, Art Unit 3696

sln